

Work Order ID 82863

82863

Page 1

April-10-12 2:33:37 PM

Item ID: D205-634-141

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Replacement Skidtube

Stop

NS2

Start Date: 10/04/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

MLJ

Date: 12/04/10 Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2580-047

(DEO) revE

100

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy D205-634 bluefile & type labels per PPP D205-634-141 CHG003

N/A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Required Date: 24/04/2012 Req'd Qty: 1.00

1

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Reference:

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Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

110

0.00

110

Skidtubes

Skidtubes

Memo

0.00

Skidtubes

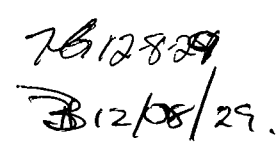
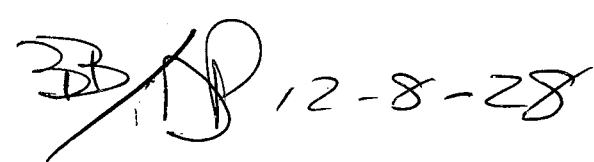
1- Inspect mat'l D2500-1-190 for damage

2-Cut D2500-1-190 per Dwg D2580 if necessaryDeburr ends

3-Drill pilot holes using DT8149, drill #30 hole (3.630 REF) using DT8149 and SPOT drill #30 (5.338 & 5.985 REF) using DT8149. Open holes to finished size except for (4) AFT spot drilled holes as per dwg D2580 sheet 7.

4-Drill pilot holes using drill jig DT 8149 and open holes to finish size

5-Acid etch and Alodine tube per QSI 005 4.1

6- Install web as per dwg using sikaflex
A/R Sikaflex Batch #: 122443

120

0.00

120

BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

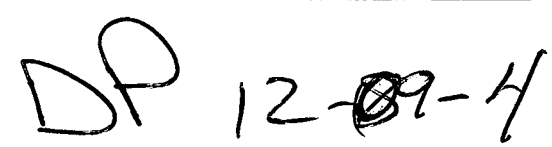
0.00

CNC Delta 100 Bender

1-Bend as per program D2580.C on CNC Bender and Folio FT 16

2-Cut tubes as per Dwg. D2580

3- Scribe batch# in aft end of tube



W/O:		WORK ORDER CHANGES					
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N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Replacement Skidtube

Start Date: 10/04/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130	Skidtubes								
Skidtubes	Memo	0.00							
Skidtubes	1 -Deburr ends after cutting and remove bending marks. Prepare tube for welding D2576-3 step remove alodine as required.								
	2 -Locating from most fwd saddle hole, drill most fwd wearplate hole using DT9793 (10.832 REF) as per dwg D2580 sheet 7.								
	3 -Open run-on wearplate holes to finished size at locations (5.338/ 5.985/ 10.832 REF) as per dwg D2580 sheet 7.								
	4 -Drill pilot holes for aft cap using DT8215, Open to finished size.								
140	QC5- Inspect part completeness to step on W/O	0.00							
140									
QC	Memo	0.00							
Quality Control									

CF 12.9.5

/ 0 12-09-05



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Item ID: D205-634-141

Accept

N9000040100

Setup Start *NS1*

Revision ID:

Item Name: Replacement Skidtube

Stop *NS2*

Start Date: 10/04/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Skidtubes	0.00							
150	Skidtubes	0.00							
Skidtubes	Memo	0.00							
	1-Weld step D2576 as per Dwg. D2580 and QSI004								
	A/R Aluminum Rod								
	2-Touch up alodine on run on wearplate holes prior to swaging								
	3- Insert D4202-1 spacer, swage as per QSI002 and trim/ grind flush per QSI002 and as per dwg								
160	QC10- Inspect visual per QSI004- ground welds	0.00							
160	QC	0.00							
Quality Control	Memo	0.00							
170	QC5- Inspect part completeness to step on W/O	0.00							
170	QC	0.00							
Quality Control	Memo	0.00							

BE 12/09/06
CF 12.95

DAS 16
12/09/10

DAS 16
12/09/10

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Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals: Process Plan: Date:

Tooling:

Date:

Run Start *NR1*

QC: Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	Pressure Wash per QSI005 4.3	0.00							
180						1		76	12-9-10
HandFinish	Memo	0.00							
Hand Finishing	And realodine tube as per QSI 005								
190	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
190									
Powdercoat	Memo	0.00							
Powder Coating	START TIME: 9:30 OVEN TEMPERATURE: 320°F FINISH TIME: 10:00								
200	QC3- Inspect Part Finish	0.00							
200						1			12-9-10
QC	Memo	0.00							
Quality Control									

m121841

1X ϕ m12/09/10

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Stop ***NS2***

Start Date: 10/04/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	Assemble as per dwg	0.00							
210	HandFinishing					1	1	BR 12-9-10	
HandFinish	Memo	0.00							
Hand Finishing	1-Install inserts & wearplates as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates A/R Sikaflex-291 <u>12/4/12</u> Sikaflex expire date: <u>12-3</u>								
	2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594								
	3- Install aft cap as per dwg								
	4- Wing walk as per dwg Batch# <u>122300</u>								
220	QC5- Inspect part completeness to step on W/O	0.00							
220									
QC	Memo	0.00							
Quality Control	Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024								

SmB
12-9-11
DAS
16
7/6/12

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Setup Start ***NS1***

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Item Name: Replacement Skidtube

Stop ***NS2***

Start Date: 10/04/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230		0.00							
230	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPPD205-634-141								
	Location:								
	PPP Rev: <u>PPA86811</u>								
240		0.00							
240	QC21- Final Inspection - Work Order Release								
QC	Memo	0.00							
Quality Control									

12/9/25

12/9/25

12-09-25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

April-10-12 2:33:41 PM

Page 1

Work Order ID: 82863

82863

Parent Item: D205-634-141

D205-634-141

Parent Item Name: Replacement Skidtube

Start Date: 10/04/2012

Required Date: 24/04/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevA 11.09.14 new issue EC verified by:DD
12.01.23 AS PER ECN11-684 DD VERF:EC

IPP REV:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2500-1-190

Manufactured

No

110

Each

100.0000

1

1

D2500-1-190

Ext'n -1" Beam Tube 4"

**

12/08/23

Location

Loc Qty

Loc Code

HALL

100

74777

20

80061

80

D2596

Manufactured

No

110

Each

10.0000

1

1

D2596

Web, 205 Skidtube

**

12/08/23

Location

Loc Qty

Loc Code

LG

10

80185

2

80820

1

81847

1

81848

4

82323

2

D4202-1

Manufactured

No

150

Each

290.0000

24

24

D4202-1

Spacer

**

24 CF 12.9.6

Location

Loc Qty

Loc Code

LG

5

77727

5

LG002

285

78806

6

79810

279

85453
87948

12
12

W/O:		WORK ORDER CHANGES					
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 2

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82863

Parent Item: D205-634-141

D205-634-141

Parent Item Name: Replacement Skidtube

Start Date: 10/04/2012

Required Date: 24/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN4-45A

Purchased

No

210

Each

114.0000

8

8

AN4-45A

Bolt

**

BL 12-9-10

Location

Loc Qty

Loc Code

ST350A ~~81111~~

114

118926 ✓

64

121162

50

8

D2570

Manufactured

No

210

Each

125.0000

16

16

D2570

Bushing

**

BL 12-9-10

Location

Loc Qty

Loc Code

ST011 88781

125

72960

41

78586

9

78587

42

79493

33

16.

D4406-041

Manufactured

No

210

Each

2.0000

1

1

D4406-041

Fwd Wearplate Assembly

**

BL 12-9-10

Location

Loc Qty

Loc Code

Return2012

2

74147

2

D4406-043

Manufactured

No

210

Each

5.0000

1

1

D4406-043

Aft Wearplate Assembly

**

BL 12-9-10

Location

Loc Qty

Loc Code

FP001

3

80757

3

Return2012

2

74148

2

1

April-10-12 2:33:41 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Parent Item: D205-634-141

Parent Item Name: Replacement Skidtube

82863

D205-634-141

Start Date: 10/04/2012

Required Date: 24/04/2012

Start Qty: 1.00

Required Qty: 1.00

MS21042-4

Purchased

No

210

Each

1,137.000

8

8

MS21042-4

USE MS21042L4

**

BL 12-8-10.

Location

Loc Qty

Loc Code

ST299

1137

100743

9

119124

1000

5461

3

6844

19

7690

24

8182

70

9063

8

9229

4

D2576-3

Manufactured

No

150

Each

35.0000

1

1

D2576-3

Step (maching detail)

**

BL 12/09/06
82257 *1

Location

Loc Qty

Loc Code

LG

35

74136

35

D2855

Manufactured

No

210

Each

41.0000

1

1

D2855

Cap

**

BL 12-9-10.

Location

Loc Qty

Loc Code

FP002

41

65519

2

73347

29

75074

10

April-10-12 2:33:41 PM

Shop Packet Print

Page 3

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Parent Item: D205-634-141

D205-634-141

Parent Item Name: Replacement Skidtube

Start Date: 10/04/2012

Required Date: 24/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN3-5A Purchased No

210 Each

1,536.000 2 2

AN3-5A

Bolt

**

BL 12-9-10.

Location

Loc Qty

Loc Code

ST350

1536

115371

46

117423

124

118626

166

119355

200

120187

500

121185

500

AN960JD10L *** NAS1149D0332 *✓* Purchased No

210 Each

0.0000 2 2

***AN960JD10I ***

Washer

D2594-3 Manufactured No

210 Each

2,674.000 8 8

D2594-3

O-Ring, 205 Skidtube

**

BL 12-9-10.

Location

Loc Qty

Loc Code

FP001

2674

65518

41

79496

984

79573

50

79755 *✓*

1599

8

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Parent Item: D205-634-141

D205-634-141

Parent Item Name: Replacement Skidtube

Start Date: 10/04/2012

Required Date: 24/04/2012

Start Qty: 1.00

Required Qty: 1.00

D2594-1

Manufactured No

210

Each

567.0000

8

8

D2594-1

**

Plug, 205 Skidtube

BL D-9-10.

Location

Loc Qty

Loc Code

FP001

85454.

322

73401

30

74442

34

79495

258

FP-A

245

73401

0

78590

245

8.

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LIST OF MATERIALS				
ITEM	QTY -041	QTY -045	QTY -047	PART NUMBER
1	X			D2580-041
2		X		D2580-045
3			X	D2580-047
4	1	1	1	D2500-1-190
5			16	D2570
6	1	1	1	D2576-3
7	20	24	25	D2579
8	16	16	8	D2594-1
9	16	16	8	D2594-3
10	1	1	1	D2596
11	1	1	1	D2855
12	1	1		D3564-5
13	1	1		D3564-9
14	1	1		D3564-11
15	1	1		D3564-13
16	2	2		D3566-1
17	1	1		D3566-5
18	1	1		D3566-13
19			1	D4408-041
20			1	D4406-043
21	50	50		ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130
22	50	50		AN3C4A
23	2	2	2	AN3-5A
24			8	AN4-45A
25	50	50		NAS1149C0332R
26	2	2	2	NAS1149D0332J
27			8	MS21042-4
				DESCRIPTION
				SKIDTUBE ASSEMBLY
				SKIDTUBE ASSEMBLY
				SKIDTUBE ASSEMBLY
				EXTRUSION
				BUSHING
				STEP
				SPACER
				PLUG
				O-RING
				205 WEB
				AFT CAP
				WEARSHOE
				WEARSHOE
				WEARSHOE
				WEARSHOE
				GASKET
				GASKET
				GASKET
				WEARPLATE ASSEMBLY
				WEARPLATE ASSEMBLY
				INSERT
				BOLT
				BOLT
				BOLT
				WASHER (AN960C10L)
				WASHER (AN960JD10L)
				NUT (OR MS21042L4)

GENERAL NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB
POWDER COAT ASSEMBLY (-041/-047) GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
POWDER COAT ASSEMBLY (-045) GREEN SANDEX (REF 4.3.5.8) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4.
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D2580-041 = 34.5 lbs
D2580-045 = 34.5 lbs
D2580-047 = 37.7 lbs
- 8) WELDING PER DART QSI 004.
- 9) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO
OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE
BENDING. ENSURE HOLES LINE-UP.
- 10) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND
ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS
ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 11) USE DART DRILL TEMPLATE DT8217 & DT8937 ONLY FOR D2580-041/-045 TO LOCATE AND
DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTIONS B-B
AND F-F (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND NAS1149C0332R WASHERS
WITH SIKAFLEX-241/291.
- 12) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
AFTER FINISH (16 PLACES FOR D2580-041/-045 AND 8 PLACES FOR D2580-047)
- 13) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE
WITH THE SPACER AT THIS LOCATION

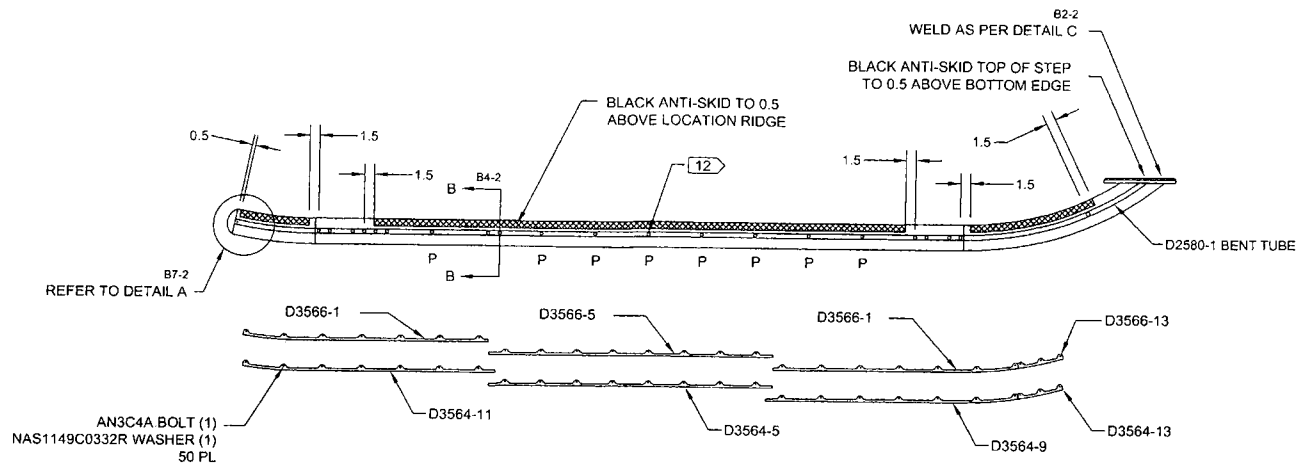
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2011-08-29

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RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 82863 MLJ
12/04/10

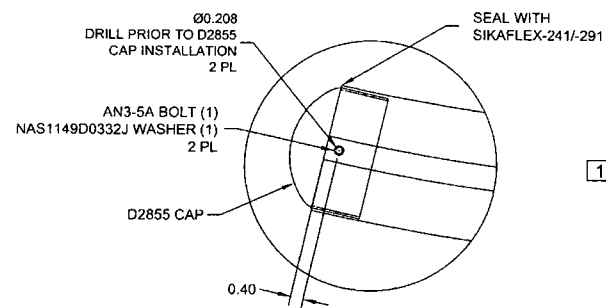
E	ADD D2580-047 (ZN C4-7) AND D2580-7 (ZN B3-8); INCLUDED DEO D2580-D-1; REFORMATTED DRAWING TO CURRENT STANDARDS; DT8217 & DT8937 WAS TD2577-205 (ZN C4-1)	RF	11.06.21
D	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/ 9183	PH	07.04.05
C	REDRAWN, INCLUDED DEO 9094/ 9097	CP	98.08.26
B	AS MANUFACTURED	DS	96.12.02
A	NEW ISSUE	DS	96.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	#	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	10	DRAWING NO.	REV. E
MFG. APPR.	10	D2580	SHEET 1 OF 8
APPROVED	10	TITLE	SCALE
DE APPR.	10	205 SKIDTUBE ASSEMBLY	NTS
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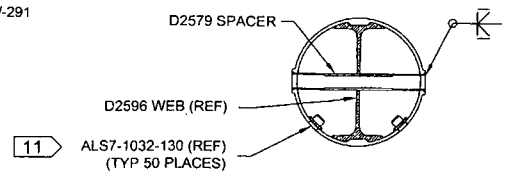


D2580-041 ASSEMBLY DETAIL

DETAIL A
SCALE 5X

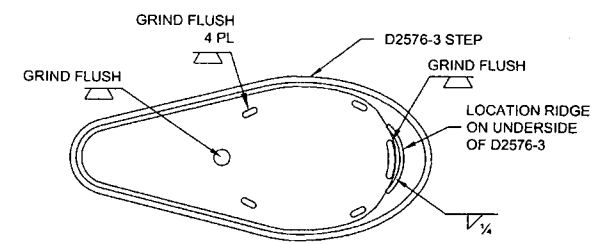


SECTION B-B
SCALE 5X



AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2579 SPACER (20 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP

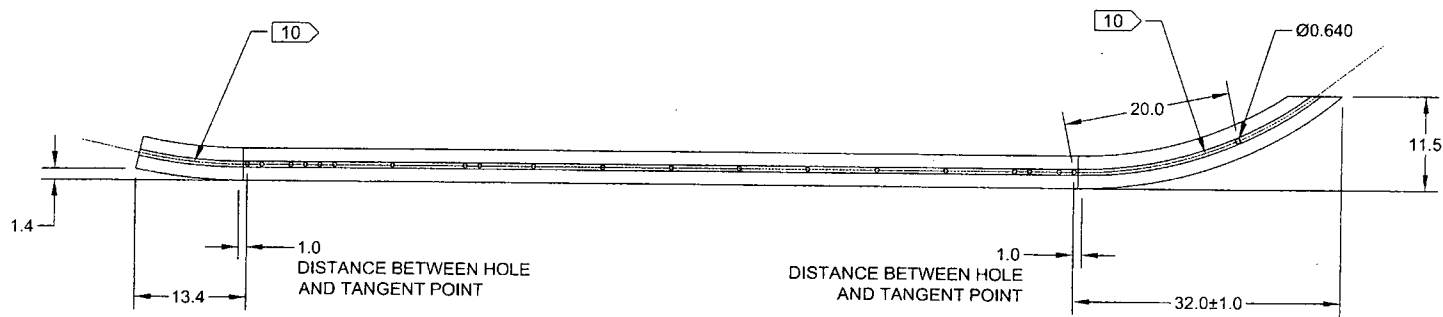
DETAIL C
SCALE 5X



DESIGN	4	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	140	DRAWING NO.	REV. E
MFG. APPR.	140	D2580	SHEET 2 OF 8
APPROVED	140	TITLE	SCALE
DE APPR.	140	205 SKIDTUBE ASSEMBLY	NTS
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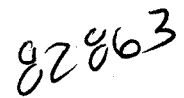


D2580-1 BENT TUBE
(MAKE FROM D2580-101 TUBE)

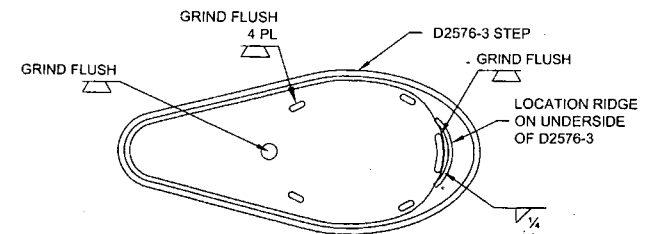
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DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	RF	D2580	SHEET 3 OF 8
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	205 SKIDTUBE ASSEMBLY	NTS
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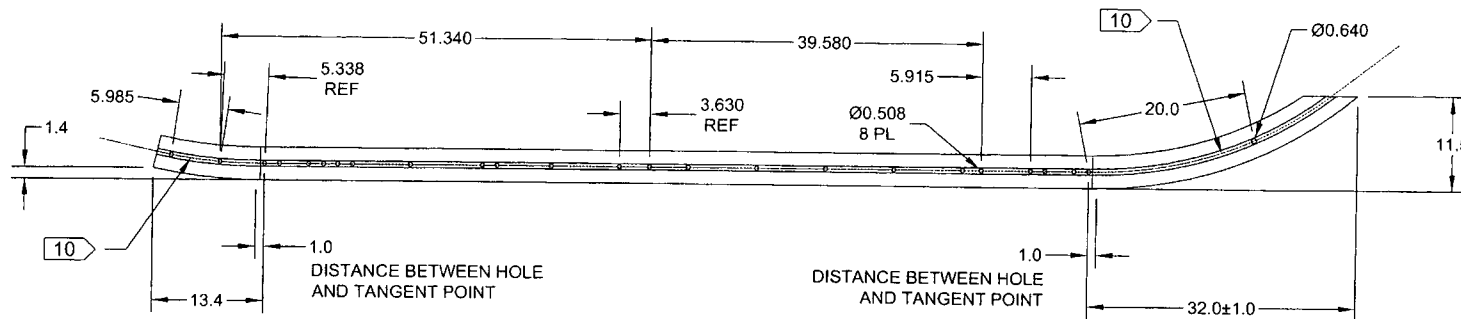


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2011-08-29
MP



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|------------|-----------|---|--------------|
| DESIGN | <i>4</i> | DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | RF | | |
| CHECKED | <i>10</i> | DRAWING NO. | REV. E |
| MFG. APPR. | <i>10</i> | D2580 | SHEET 4 OF 8 |
| APPROVED | <i>10</i> | TITLE | SCALE |
| DE APPR. | <i>4</i> | 205 SKIDTUBE ASSEMBLY | NTS |
| DATE | 11.06.21 | COPYRIGHT © 1996 BY DART AEROSPACE LTD
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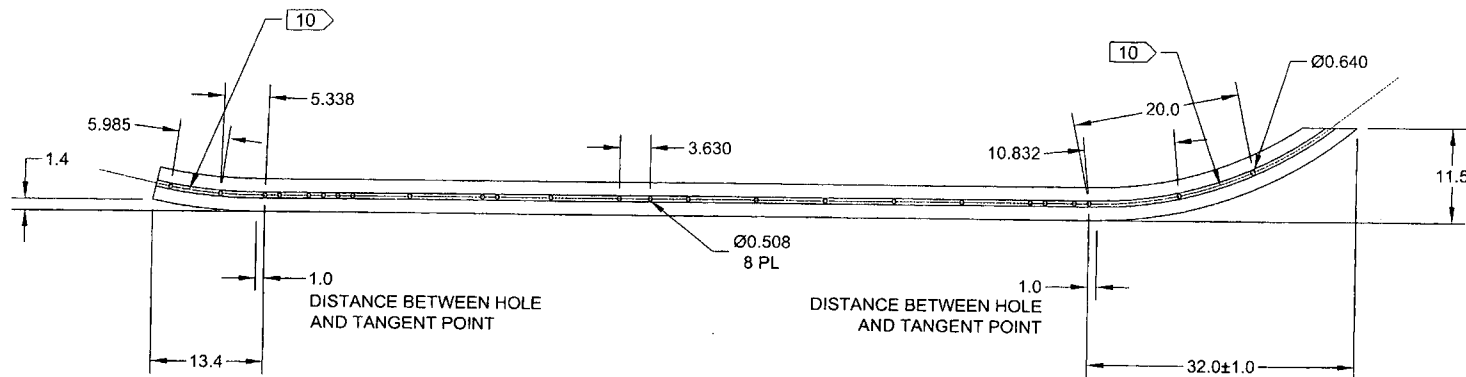
D2580-5 BENT TUBE
(MAKE FROM D2580-101 TUBE)

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2011-08-29
AND

DESIGN	#	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	140	DRAWING NO.	REV. E
MFG. APPR.	140	D2580	SHEET 5 OF 8
APPROVED	140	TITLE	SCALE
DE APPR.	#	205 SKIDTUBE ASSEMBLY	NTS
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D2580-7 BENT TUBE
(MAKE FROM D2580-101 TUBE)

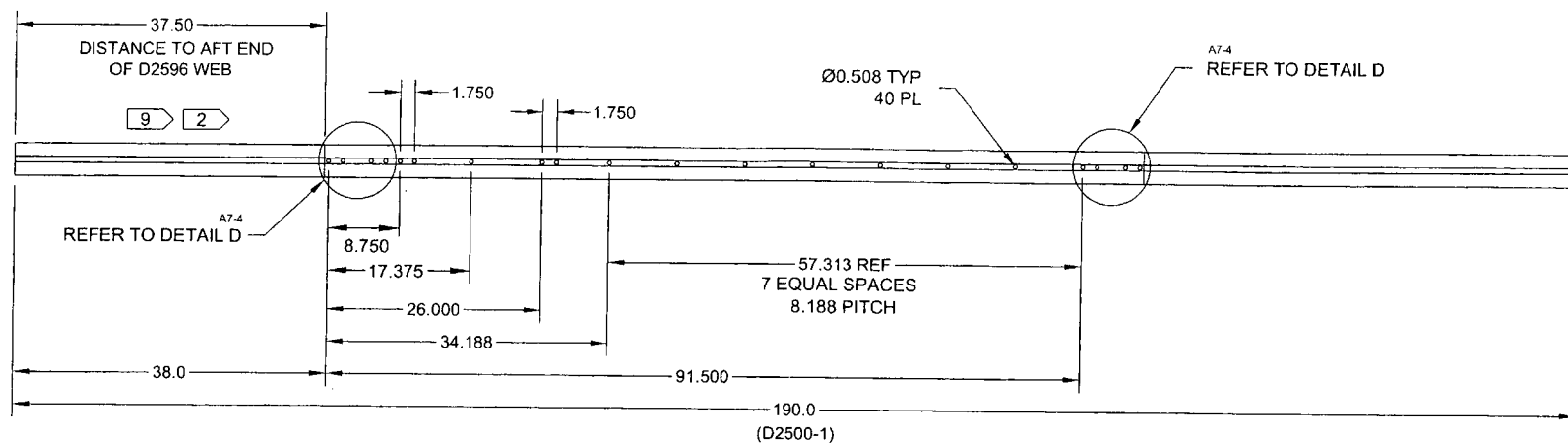


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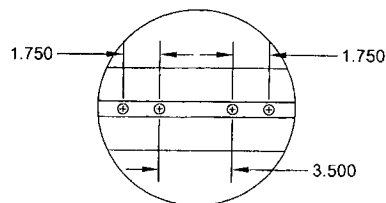
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2011-08-29

DESIGN	#	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	10	DRAWING NO.	REV. E
MFG. APPR.	10	D2580	SHEET 7 OF 8
APPROVED	10	TITLE	SCALE
DE APPR.	10	205 SKIDTUBE ASSEMBLY	NTS
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D2580-101 TUBE



DETAIL D
SCALE 5X

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DESIGN	#	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	1P	DRAWING NO.	REV. E
MFG. APPR.	1P	D2580	SHEET 8 OF 8
APPROVED	1P	TITLE	SCALE
DE APPR.	#	205 SKIDTUBE ASSEMBLY	NTS
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DRAWING NO. D2580	TITLE 205 SKIDTUBE ASSEMBLY	REV. E	DART AEROSPACE LTD ENGINEERING ORDER	D.E.O. NO. D2580-E-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>UP</i>	CHECKED <i>ASS</i>	MFG. APPR. <i>ER</i>	APPROVED <i>HA</i>	DE APPR. <i>HA</i>		
DATE 11.12.13	DATE 11.12.13	DATE 11.12.13	DATE 11.12.13	DATE 11.12.13		

PURPOSE:

CHANGE ALL C'BORED WELDED CROSSBOLT SPACERS TO SWAGED SPACERS

CHANGE:

PARTS LIST IS AMENDED AS FOLLOWS:

WAS

QTY	QTY	QTY	PART NUMBER	DESCRIPTION
-041	-045	-047		
20	24	25	D2579	CROSS BOLT SPACER

IS

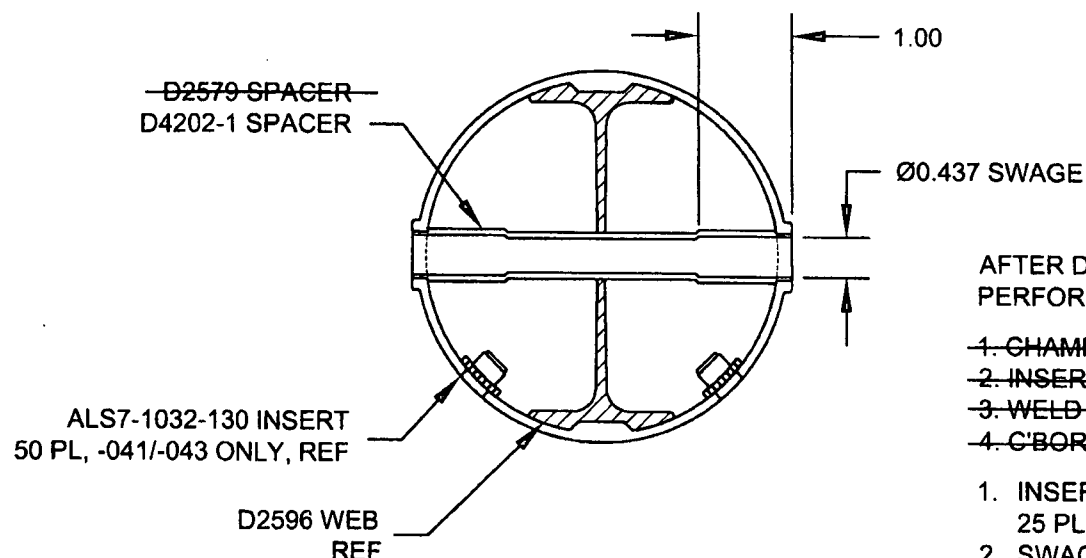
	4		* D2579	CROSS BOLT SPACER
20	20	25	D4202-1	SPACER

SECTION B-B, SECTION F-F, & SECTION I-I ARE AMENDED AS FOLLOWS
FOR ALL HOLES THAT WERE ORIGINALLY C'BORED:

*** FOR -045 SKIDTUBE ONLY:**

WELD 4X D2579 SPACERS PER DWG
IN LOCATIONS MARKED "NO C'BORE".
REF SHEET 4 OF DWG.

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2011-12-14



SECTION B-B, F-F, I-I

NOT TO SCALE

AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2579 SPACER (20 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP

1. INSERT D4202-1 SPACER, 20 PL (-041) OR 20 PL (-045) OR 25 PL (-047)
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002
3. TRIM / GRIND FLUSH PER QSI 002

